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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,817	03/06/2002	Shin Tamata		6907

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EXAMINER	
BHAT, NINA NMN	
ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,817

Applicant(s)

TAMATA ET AL.

Examiner

N. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 9-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's preliminary amendment canceling claims 1-8 is acknowledged by the examiner. Action on the merits of claims 9-16 follows:

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Rossin et al. USP 6,069,291

Rossin teaches a catalytic decomposition of perfluoroalkanes which includes contacting the perfluoroalkanes with aluminum oxide wherein the oxide is stabilized with an element selected from the group consisting of barium, calcium, cerium chromium, cobalt, iron lanthanum, phosphorus, magnesium, nickel, silicon, etc. , wherein a gas stream containing one or more perfluoroalkanes, an oxidizing agent such as air and

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water vapor is passed through a catalyst bed containing a catalyst composition as described above is heated to a desired operation temperature, the flow rates through system are sufficient to permit for greater than at least 80% and greater than 90% destruction of the perfluoroalkanes present. The apparatus or system operates at temperatures between 400°C and 1000°C. Rossin teaches that the effluent stream can be subjected to caustic scrubbing to avoid venting acid gases into the atmosphere.[Note Column 2, lines 53-67, Column 4, lines 10-65, Column 5, lines 13-27]

4. Claims 9-12 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by EP1027918.

EP1027918 teach an apparatus and method for treating perfluorocompounds which comprise decomposing perfluorocompounds contained in a gas feed, which includes a suction apparatus for sucking the discharged containing acid gases resulting from the decomposition of the perfluorocompounds by a jet stream of an injected gas and ejecting the gas, specifically perfluorocompound containing gas is introduced into an aqueous alkaline liquid in an aeration stirring tank while stirring the liquid and step of removing harmful gases from the gases discharged from the aeration stirring tank, the gas-liquid contact device for allowing gases discharged the aeration stirring device comes into contact with the aqueous liquid and then subjected to a packed column filled with an agent through gases are discharged. The apparatus of EP1027918 fully anticipates applicant's claims even with the addition of the aerating stirring tank because applicant has drafted the claims with comprising which will opens the claims to both the elimination of apparatus elements or inclusion of apparatus elements and

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therefore the apparatus of EP1027918 anticipates applicant's apparatus as presently claimed.

5. Claims 9-16 are rejected under 35 U.S.C. 102(e) as being anticipated by EP11101524.

EP11101524 teaches a method and apparatus for treating a waste gas containing fluorocompounds by adding hydrogen and/or water vapor and/or hydrogen gas and water vapor with oxygen as a decomposition assist gas which is introduced into a packed column containing gamma alumina with the fluorocompound containing waste gas which is then decomposes the waste gas and then the resulting acidic gas is subsequently treated in a spray column. The apparatus specifically utilizes an air ejector capable of adjusting its internal pressure. The apparatus as described in EP11101524 fully anticipates applicant's claims.[Note Column 3, lines 5 et seq.]


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. EP 0 754 487 teach a process and system for separation and recover of perfluorocompound gases. Kokun et al.'929 and 069 teach a perfluoride processing apparatus. Rossin et al. teach a catalytic process for the decomposition of perfluoroalkanes. Li et al. '133 and '011 teach a process and system for separation and recovery of perfluorocompound gases. JP 10286434 teaches a decomposing method of fluorine containing gas, which is in contact with molecular oxygen in the presence of alumina as a catalyst.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
N. Bhat  
Primary Examiner  
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